ABSTRACT OF THE DISCLOSURE

A SIMD type processor includes a SIMD type arithmetic processing section which performs parallel processing by using a plurality of ALUs; and a global processor 102 that provides data to be arithmetically processed to a register and a data register group and provides the same instruction to each of the ALUs. Upon input of an interruption request for carrying out other parallel processing by interrupting a parallel processing currently carried out by the SIMD type arithmetic processing section, the global processor decides if the other parallel processing requested by the interruption request is to be carried out. The global processor suspends the parallel processing currently being carried out, when necessary. Then, the global processor 15 provides data to be arithmetically processed by the interruption processing to the register and the data register group, and provides the same instruction necessary for carrying out the interruption processing to each of the ALUs.